APHIS-ARS Master Plan for Facility Consolidation and Modernization Ames, Iowa

National Veterinary Services Laboratories

Center for Veterinary Biologics

National Animal Disease Center

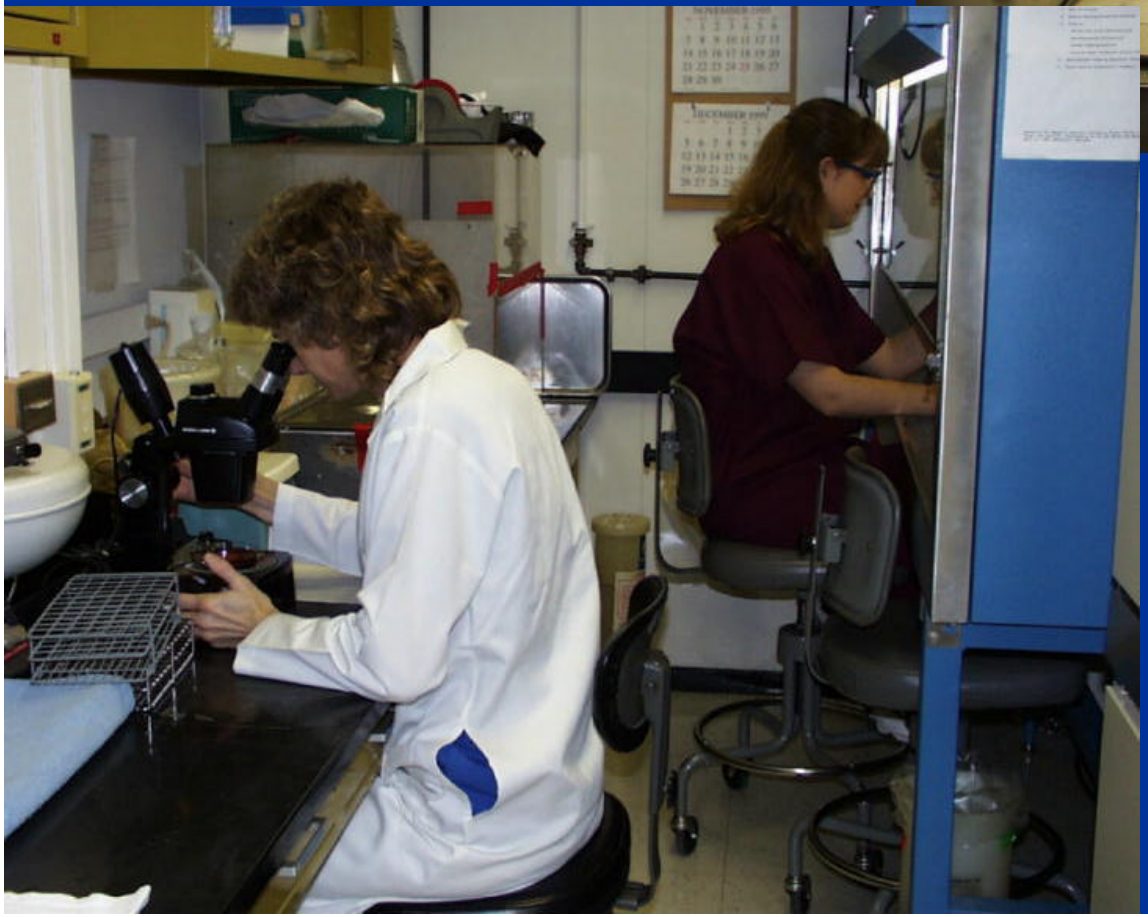
USDA

United States Department of Agriculture

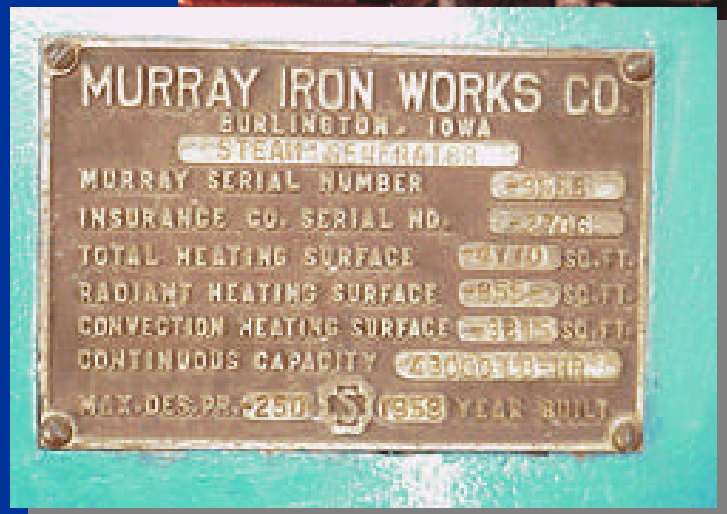
Brief History of Major USDA Animal Health Facilities in Ames, IA

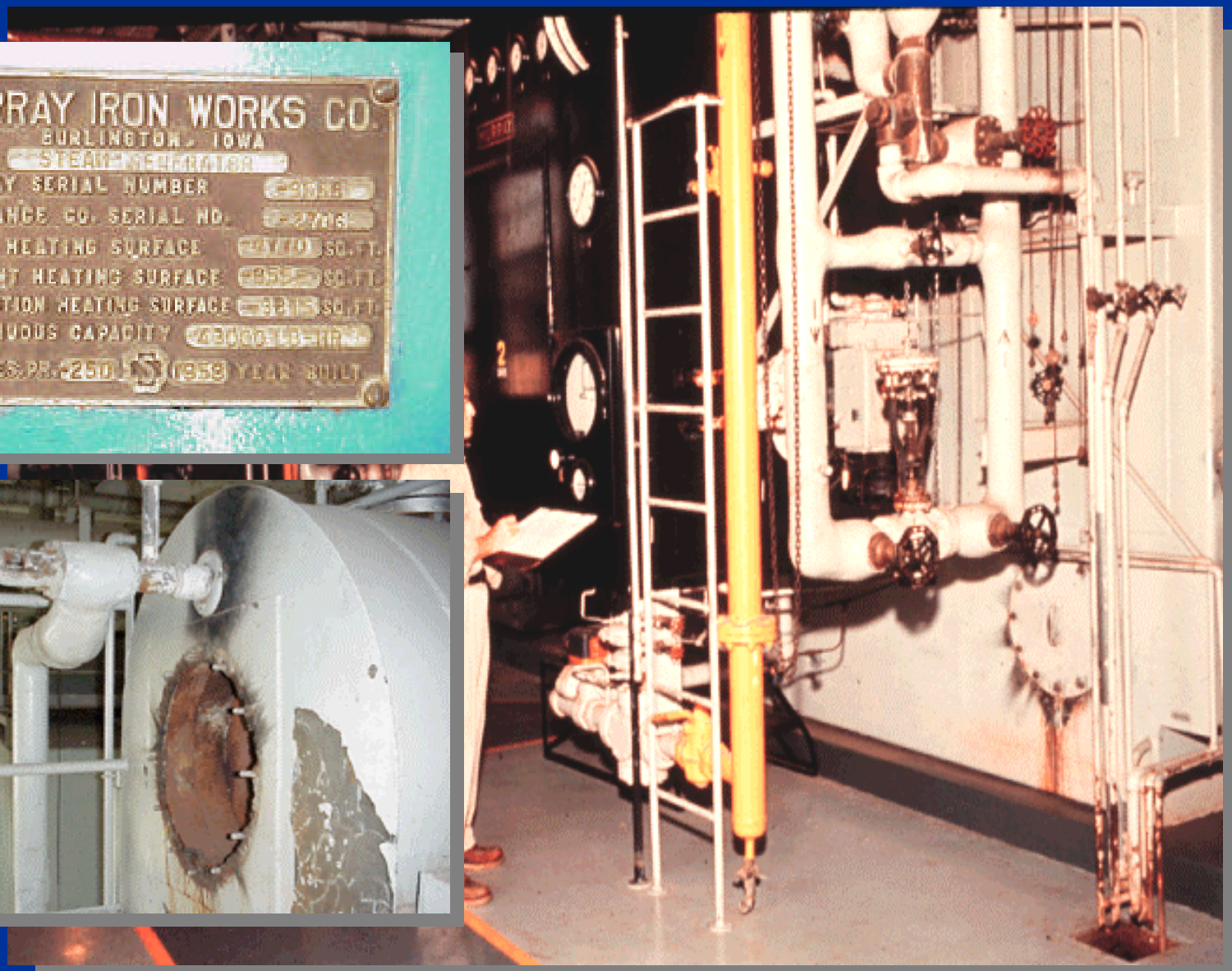
- 1961 - National Animal Disease Center (NADC)
- 1972 - National Veterinary Services Laboratories (NVSL) leased lab space
- 1978 - NVSL / Center for Veterinary Biologics (CVB) – Laboratory
- 1997 - CVB leased office space

Two Labs of NVSL in Strip Mall since 1972



Current NADC Status





National Veterinary Services Laboratories

Mission

- To provide diagnostic laboratory testing for animal disease programs designed to protect the health of U.S. livestock and poultry industries
- To provide assistance and training to the veterinary diagnostic community

National Veterinary Services Laboratories

Activities

- Preventing the incursion of foreign animal diseases into the United States
- Supporting eradication control programs
- Monitoring and surveillance
- Laboratory certification
- Reagent production
- Quality assurance

Center for Veterinary Biologics

Mission

- The Veterinary Biologics Program implements the provisions of the Virus-Serum-Toxin Act to ensure that the veterinary biologics available for the diagnosis, prevention, and treatment of animal disease are pure, safe, potent and effective

Center for Veterinary Biologics

Activities

- Licensing
- Quality Manufacturing
- Inspection
- Testing
- Serial (batch) Release
- Compliance Actions
- Vaccinovigilance

National Animal Disease Center

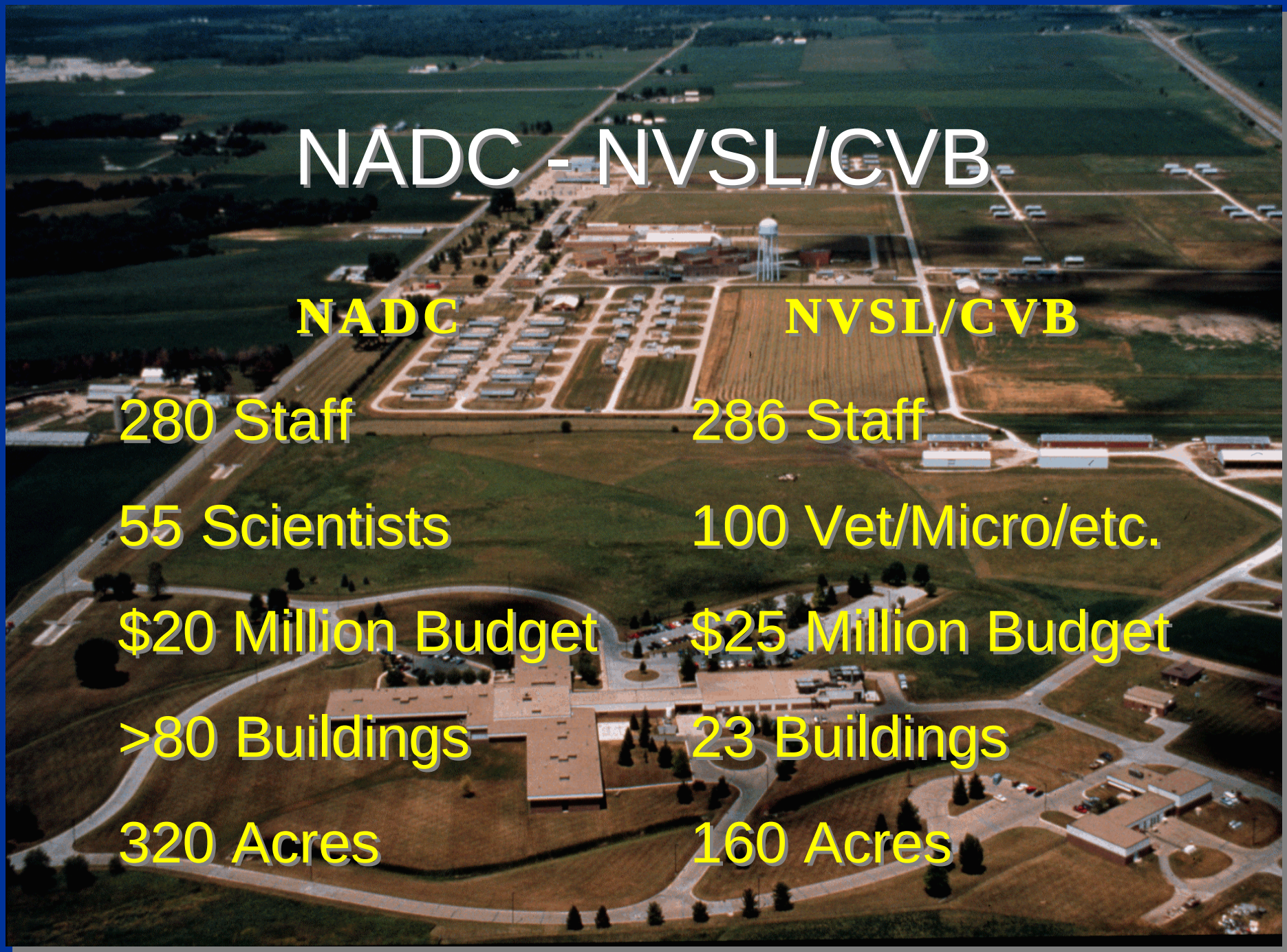
Mission

- To conduct basic and applied research on selected diseases of economic importance to the U.S. livestock and poultry industries
- Main research site for study of most important domestic and emerging animal diseases

National Animal Disease Center

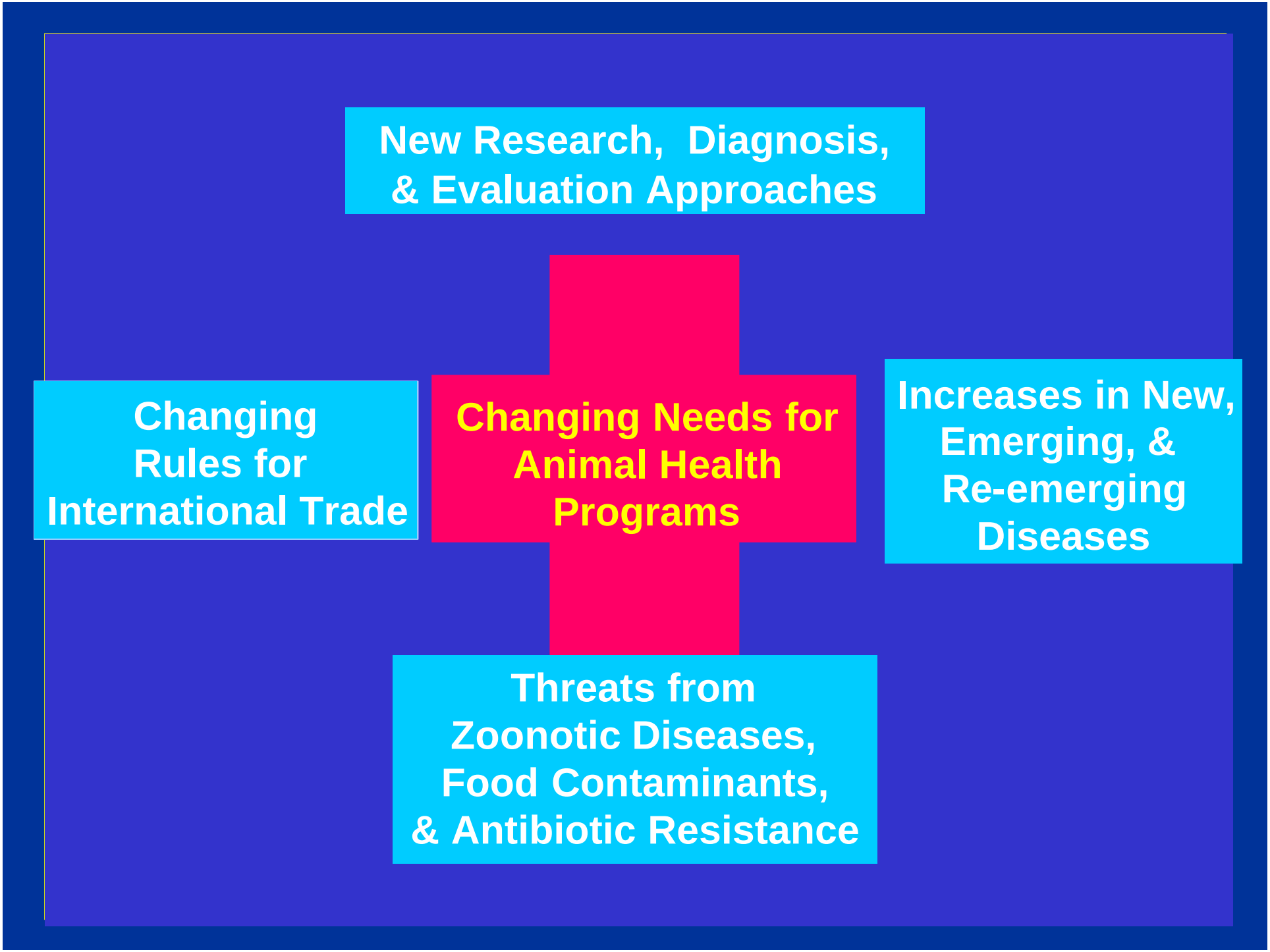
Achievements

- Hog cholera and Porcine parvovirus eradication
  - saves $175 M each year, not including exports
- Dietary acid supplement for Milk Fever
  - costs $300 M losses each year
- S19, then RB-51 vaccine development for Brucellosis
- Oral vaccine for shipping fever
  - costs $1 B in losses each year



NADC - NVSL/CVB

NADC	NVSL/CVB
280 Staff	286 Staff
55 Scientists	100 Vet/Micro/etc.
$20 Million Budget	$25 Million Budget
>80 Buildings	23 Buildings
320 Acres	160 Acres


New Research, Diagnosis, & Evaluation Approaches
Changing Rules for International Trade
Changing Needs for Animal Health Programs
Increases in New, Emerging, & Re-emerging Diseases
Threats from Zoonotic Diseases, Food Contaminants, & Antibiotic Resistance

Trends - Increasing

- Global trade of animals & animal products
- Biotechnology & informatics in research, vaccines, & diagnosis
- Volume & diversity of services demanded by customers & collaborators
- Diversity & threat of disease agents
  - New, Emerging, Re-emerging, Foreign
  - Food contaminant, antibiotic-resistant
  - Zoonotic, Bioterrorist

Increasing Standards

- Animal Care and Use
- Biocontainment
- Quality Assurance
- Biosafety
- Environmental Protection

World-class institutes must meet new global standards, requiring world-class facilities

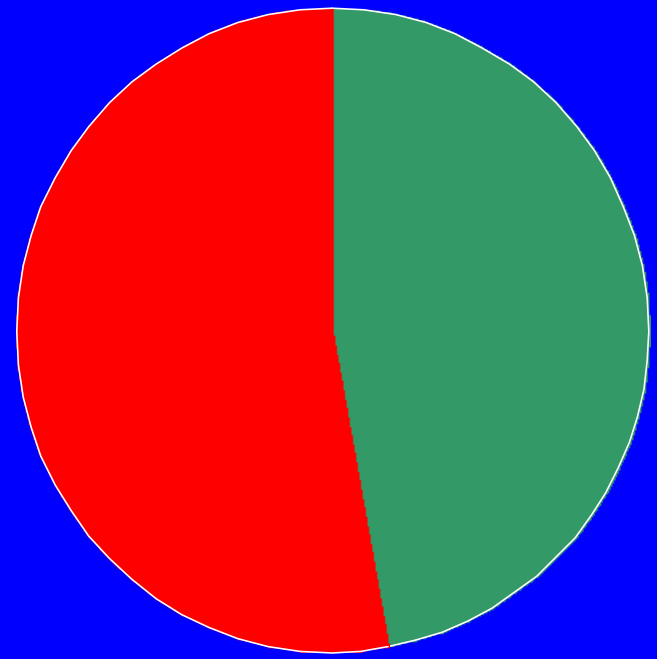
Combined Master Plan

NADC-NVSL-CVB

ARS **APHIS**

- Effective delivery of national animal health program needs
- Provision of world-class facilities
- Improved communication and collaboration between agencies
- More efficient and safer operations
- Reduction in overall construction time and cost

U.S. Agriculture Cash Receipts



Plant Sector 53%

$104.7 Billion

Animal Sector 47%

$93.4 Billion

$198 Billion in Total Cash Receipts

(USDA/ERS, 1998)

Livestock Commodity Production, 1998*

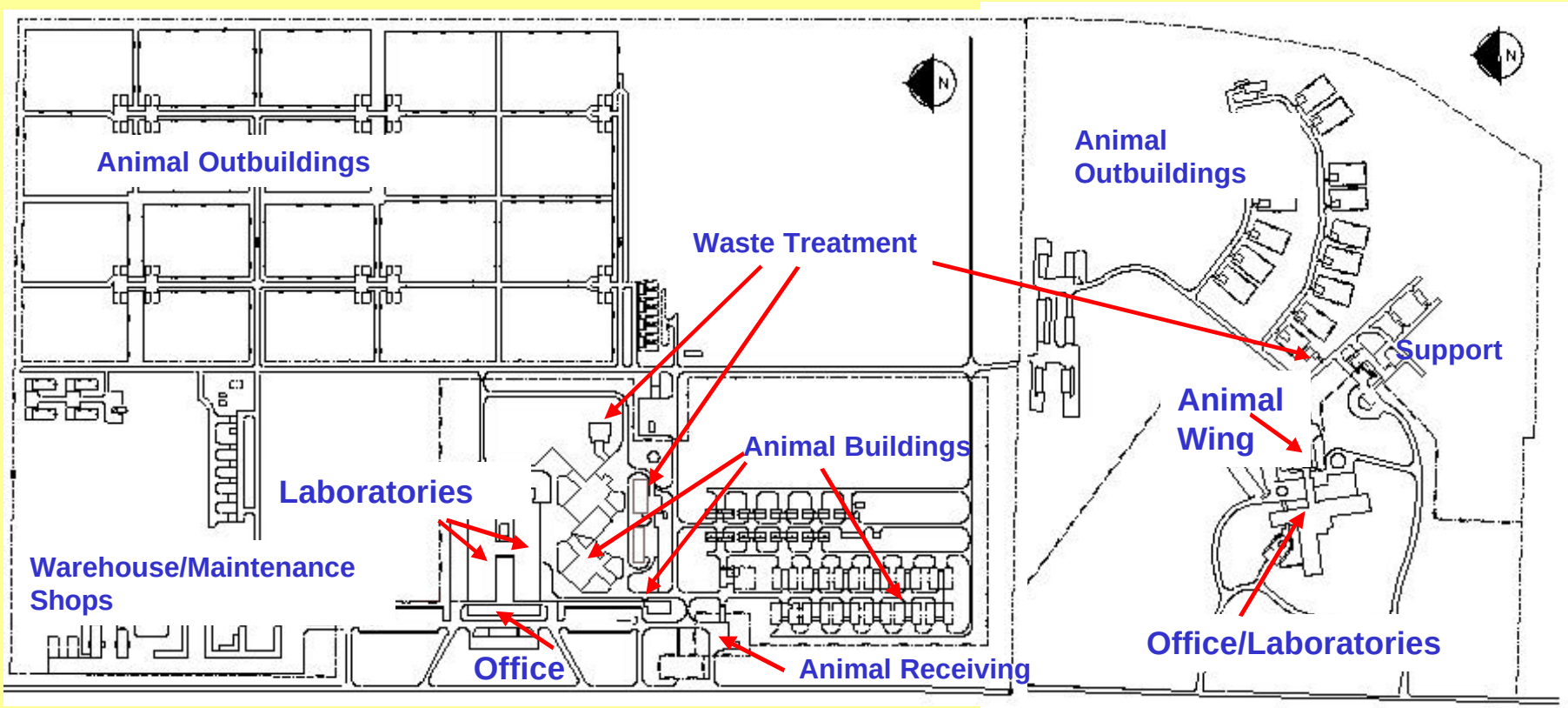
	Meat	Chicken	Hogs	Milk	Eggs	National Facility $m
Australia	3.3	0.5	0.3	9.3	0.2	450
Canada	3.3	0.8	1.3	7.8	0.3	142
Germany	5.7	0.4	3.8	28.9	0.8	500
USA	34.9	12.5	8.6	70.1	4.7	???

* million metric tons

New Canadian, Spanish, & Australian Facilities

Combined Master Plan Projected Funding Needs (in thousands)

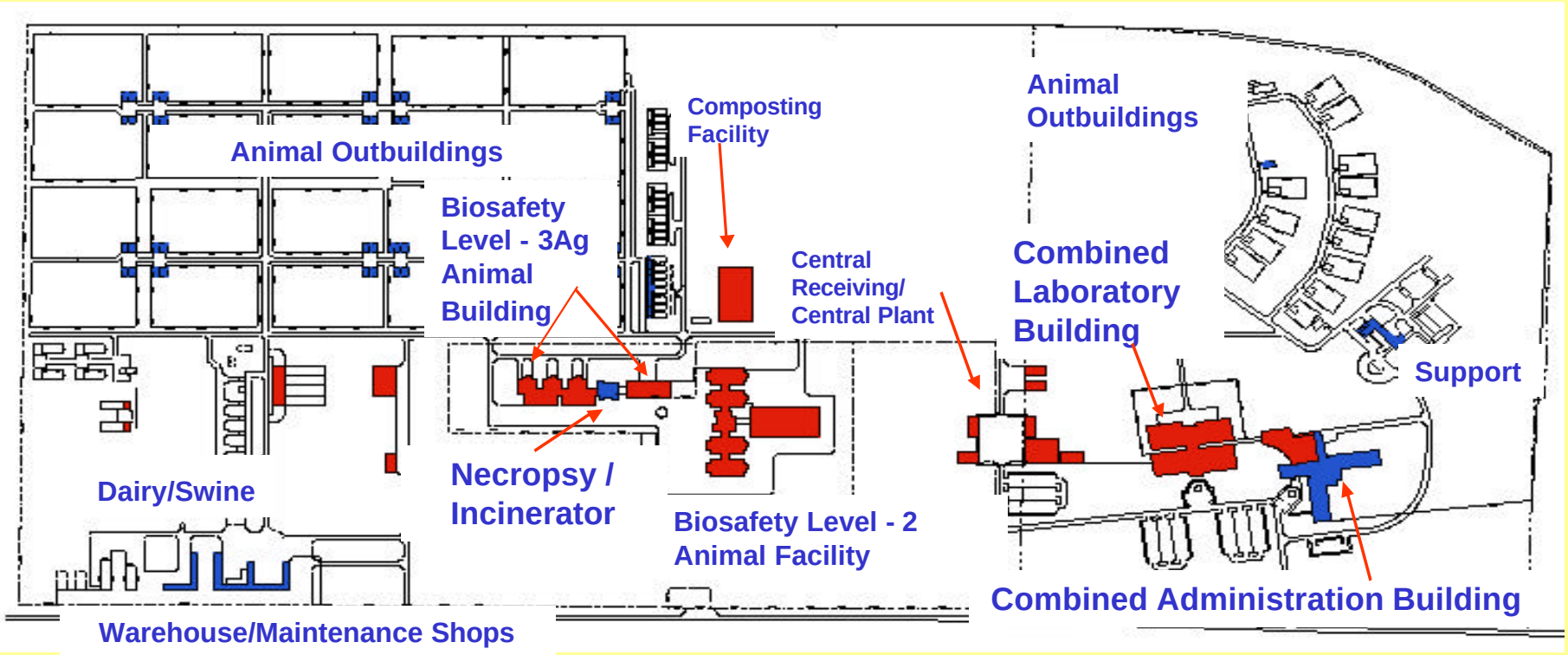
	APHIS	ARS	Combined
Design	$14,938	$29,877	$44,815
Construction	$108,796	$217,592	$326,388
Demolition	$2,528	$5,057	$7,585
Total	$126,262	$252,526	$378,788



Existing Site Plan (no scale)
National Animal Disease Center,
National Veterinary Services Laboratories, and
Center for Veterinary Biologics – Laboratory
Ames, Iowa 50010

Size: Approximately 480 acres
Number of Buildings: More than 100
(revised 12/99)

USDA
United States Department of Agriculture



New Buildings to be Built
Existing Buildings to Remain

$378,789,000, 8 years

Future Site Plan at Completion of Master Plan (no scale)
National Animal Disease Center,
National Veterinary Services Laboratories, and
Center for Veterinary Biologics
Ames, Iowa 50010

Size: Approximately 480 acres
(revised 12/99)

USDA
United States Department of Agriculture

Site View at Completion

Laboratories/Training/Offices At Completion

Biosafety Level 2 and 3-Agriculture Animal Facilities at Completion

Expenditure Categories

$46.5 Million Annually

National Veterinary Services Laboratories

Center for Veterinary Biologics

National Animal Disease Center

	NVSL	CVB	NADC
2000 Budget	17.2 M	9.7 M	19.6 M
Salaries	49.6%	78.8%	69.7%
Facilities	37.6%	7.8%	11.5%
Other costs	12.7%	13.4%	18.8%

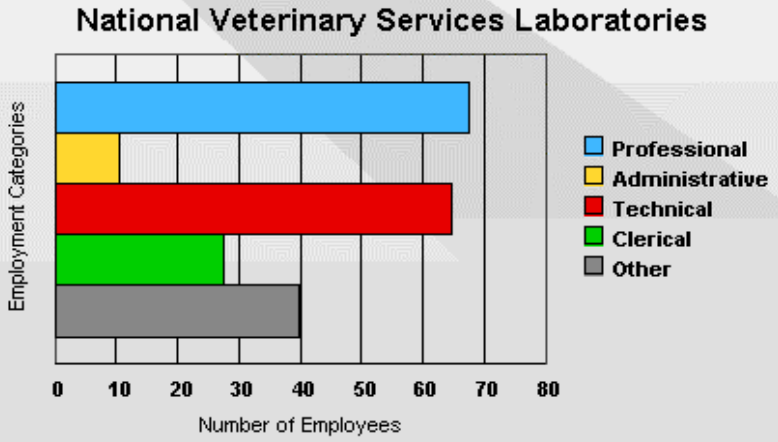
NVSL includes Ames and Plum Island facilities

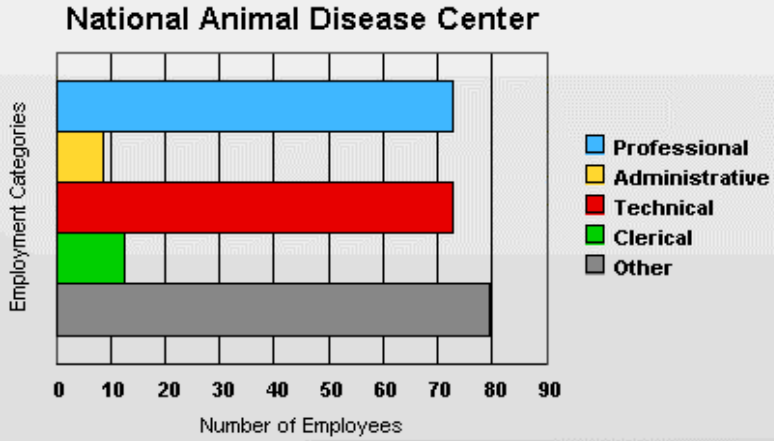
Salaries includes support staff salaries

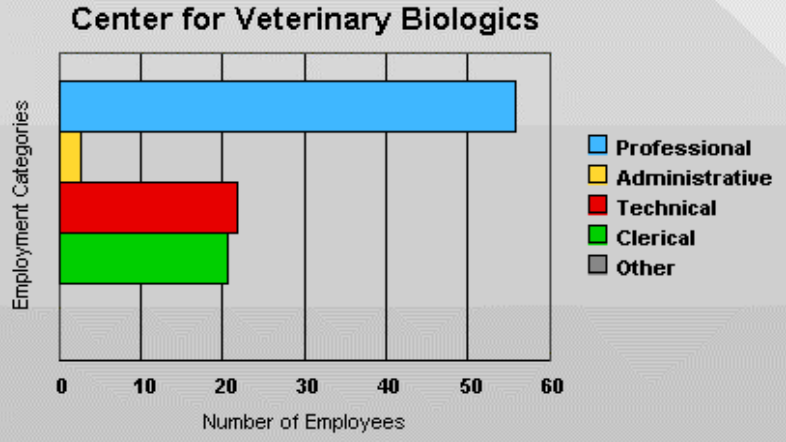
Facilities includes reimbursable agreements, rent and utilities

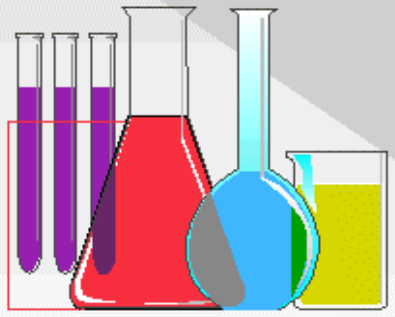
Other costs include equipment, travel, training, supplies, animals

Categories of Employees





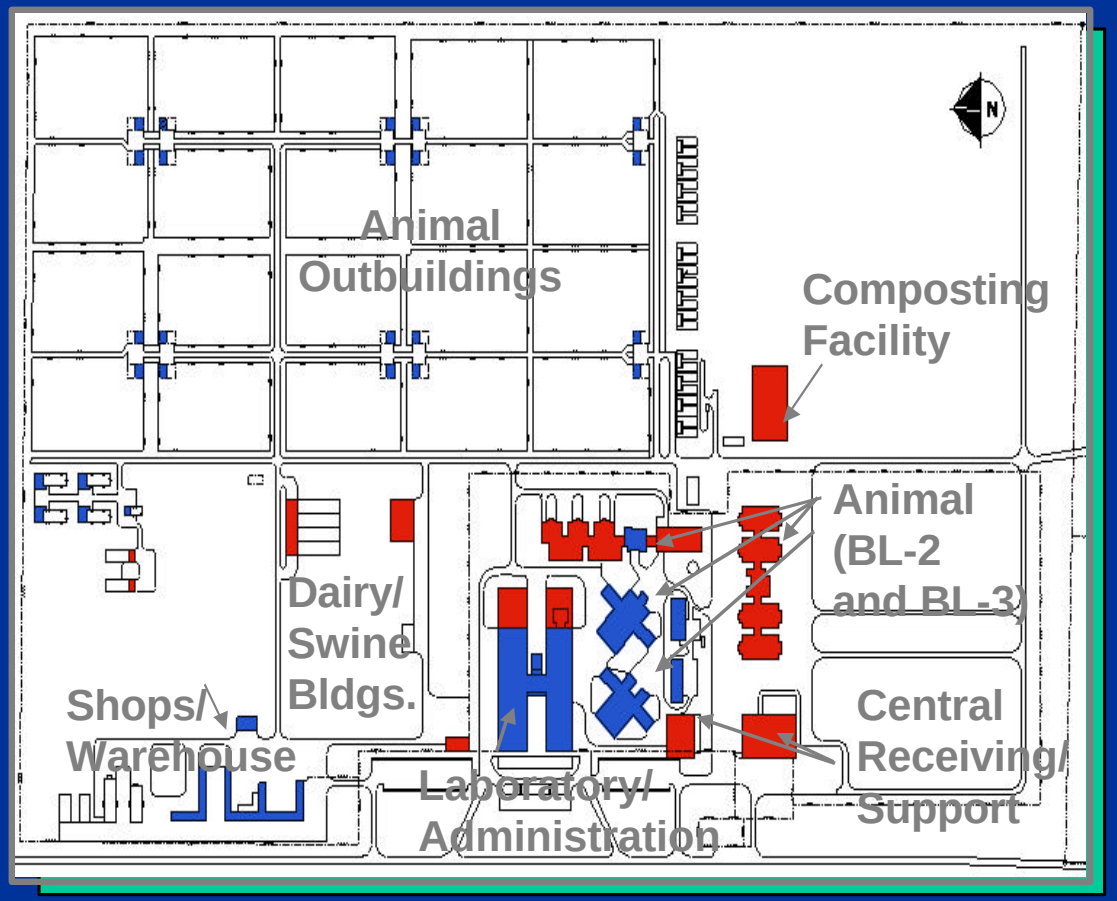




NADC - Original Master Plan

ARS

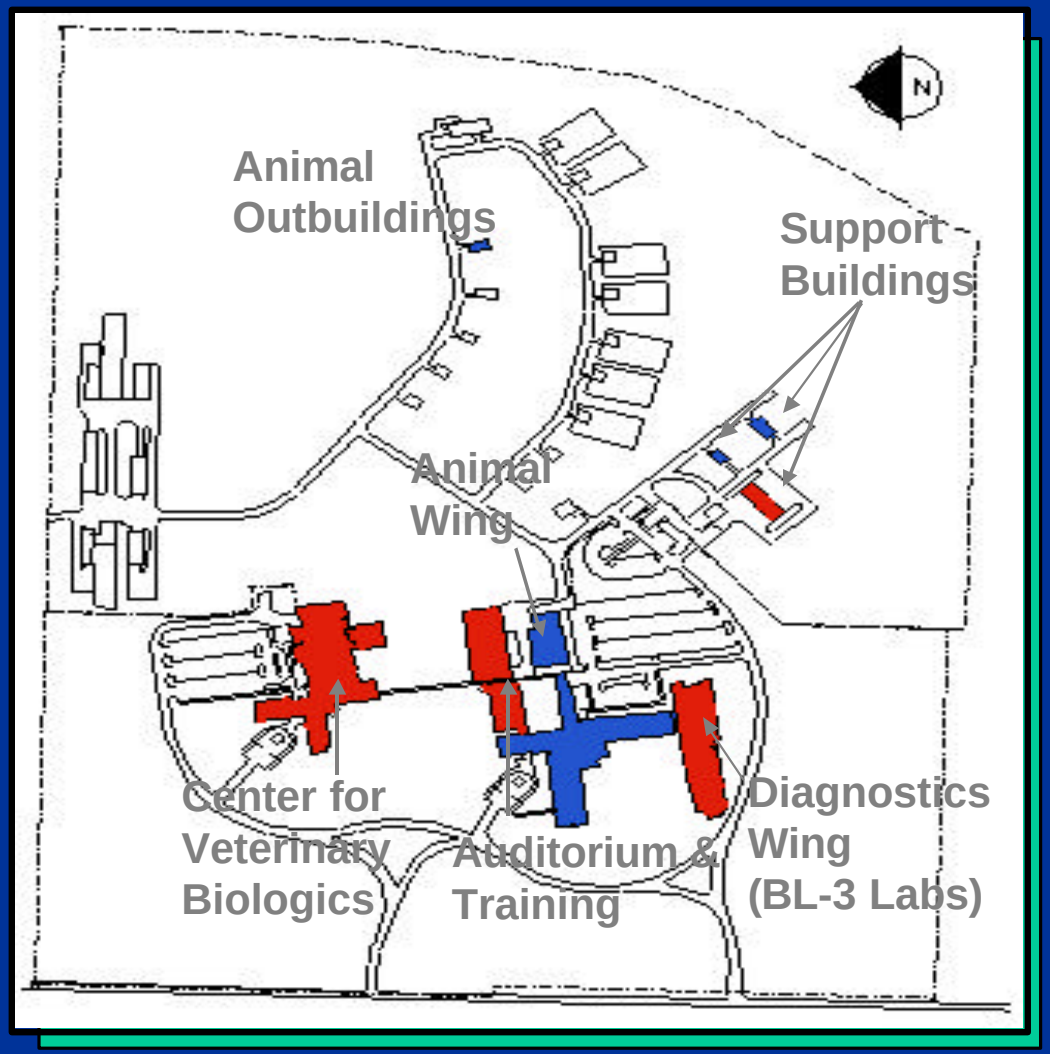
- Estimated cost: $328,327,000
- Construction schedule: 19 years

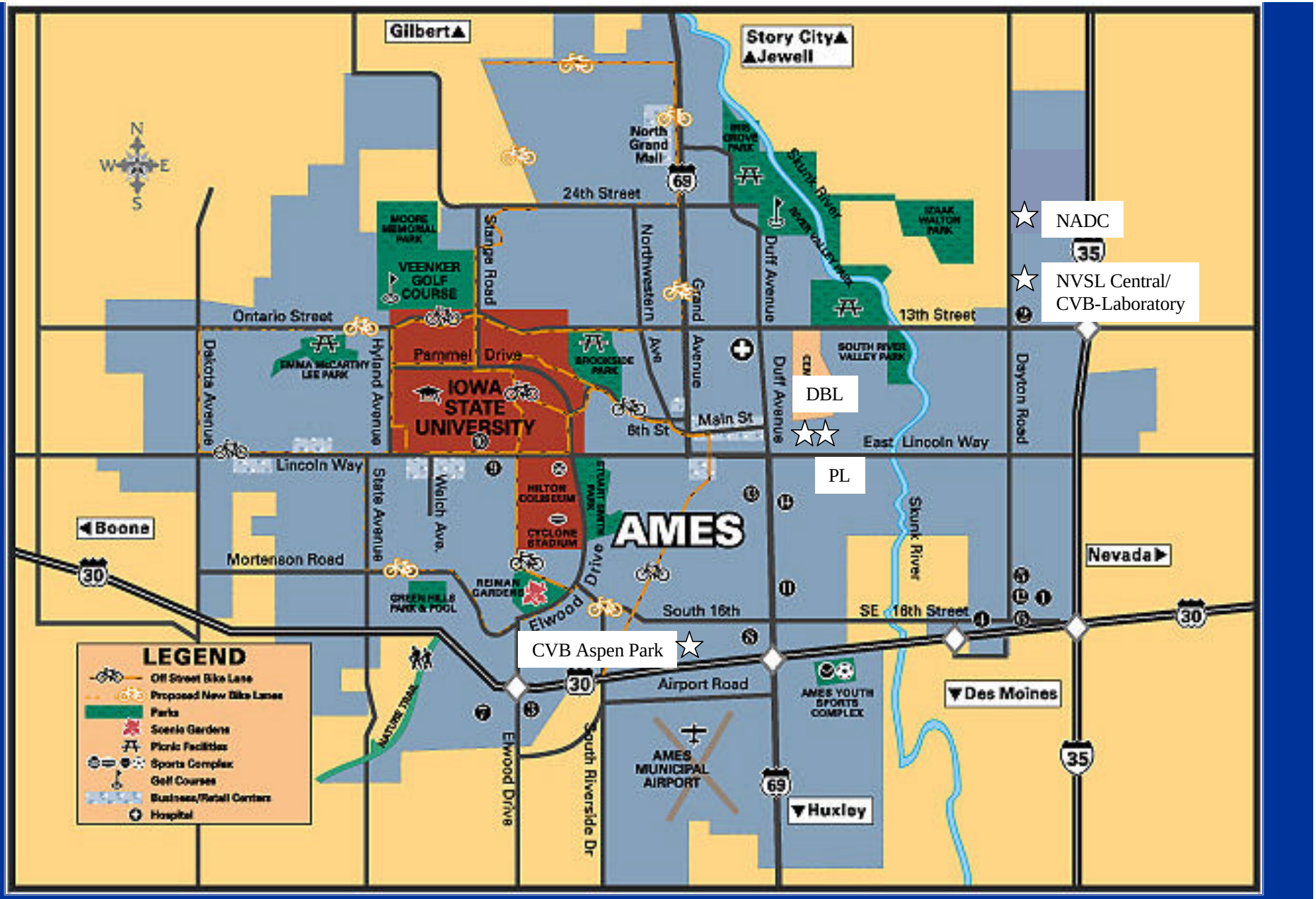


NVSL/CVB - Original Master Plan

APHIS

- Estimated cost: $121,974,000
- Construction schedule: 10 years





NVSL = National Veterinary Services Laboratories NADC = National Animal Disease Center
CVB = Center for Veterinary Biologics PL = Pathobiology Laboratory DBL = Diagnostic Bacteriology Laboratory